DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027803
Date Inspected: 20-Jun-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job site

CWI Name:	As Noted Below			**CWI Present:**	☑ Yes	☐ No		
Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: OBG/Tower

Summary of Items Observed:

Quality Assurance Inspector (QA) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

The QA inspector observed at random intervals, ABF/JV qualified welder Richard Garcia # 5892 performing Shielded Metal Arc Welding (SMAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1162-4. The welding observed was for the HPS-485 longitudinal stiffener wing plate attachment welds located between panel points 124.5 and 125 at LS3. The weld is a Partial Joint Penetration Tee joint. The weld surface and surrounding area was brought to temperature by the use of induction heaters and the preheat temperature was confirmed ABF personnel prior to welding. The Quality Control (QC) inspector Salvador Merino was observed monitoring the welding parameters. The root pass of the weld was observed to be completed prior to the end of the QA inspectors shift and requires magnetic particle testing prior to the deposit of additional layers.

OBG 13E Deck Drop-in Repairs

The QA inspector noted and periodically observed, ABF/JV qualified welder Steve Davis #7889 performing Shielded Metal Arc Welding (SMAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1004. The welding observed was for the repair of the deck panel drop-in splice weld previously rejected with Ultrasonic Testing (UT) by ABF QC personnel. The repair surface and surrounding area was brought to temperature by the use of induction heaters placed on the topside of the deck. The preheat temperature was confirmed ABF personnel prior to welding. The Quality Control (QC) inspector Salvador Merino

was observed monitoring the welding parameters at the start of welding. Weld is designated as 13E-E2.5. The weld repairs observed were performed and completed at the following locations during the QA inspectors shift;

Y=1690mm, Depth 6mm, Length=80mm
Y=1450mm, Depth 7mm, Length=120mm

ABF/JV qualified welder Steve Davis #7889 was observed later in the shift performing Shielded Metal Arc Welding (SMAW) in the 3G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1012-3. The welding observed was for the repair of the HPS-485 longitudinal stiffener splice weld previously rejected with Ultrasonic Testing (UT) by ABF QC personnel. The repair surface and surrounding area was brought to temperature by the use of a gas torch. The preheat temperature was confirmed ABF personnel prior to welding. The Quality Control (QC) inspector Salvador Merino was observed monitoring the welding parameters at the start of welding. Weld is designated as 13E-PP120.6-LS2. The weld repairs observed were completed at the following locations in the above mentioned weld prior to the end of the QA inspectors shift.

Y=60mm, Depth 13mm, Length=30mm
Y=120mm, Depth 22mm, Length=40mm
Y=210mm, Depth 14mm, Length=40mm

The QA inspector periodically observed, ABF/JV qualified welder Eddie Brown#9331 performing Shielded Metal Arc Welding (SMAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1004. The welding observed was for the repair of the deck panel drop-in flange splice weld previously rejected with Ultrasonic Testing (UT) by ABF QC personnel. The weld is designated as 13E-PP122-E2. 5-BF1. The weld repairs observed were completed at the following locations in the above mentioned weld prior to the end of the QA inspectors shift.

Y=340mm, Depth 7mm, Length=70mm

Ultrasonic Testing (OBG Deck Drop-in Lift 13 East)
This QA performed 100% Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) deck drop-in web and flange connections on lift 13E. The welds have been previously tested and accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications. The weld designations are as follows.

13E-PP122-E2.1-BF1
13E-PP122.2 -LS1
13E-PP122.2-LS2
13E-PP122.2-LS3
13E-PP123-E2.1-BF2
13E-PP124.5-E2.2-BW1

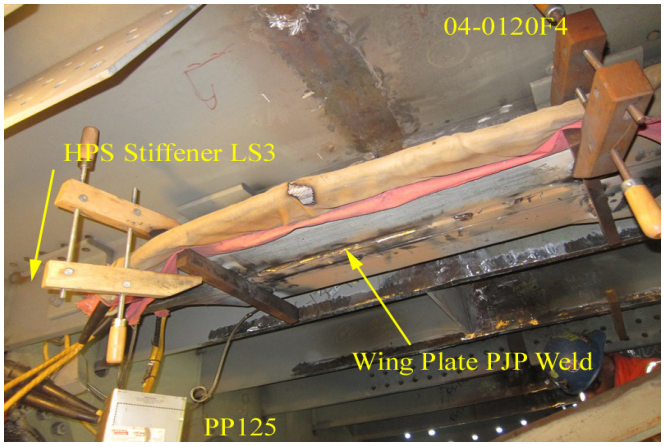
This QA spent a portion of this reviewing and documenting the status and completion of various production welding tracking logs for lift 13E/14E drop-in deck work currently in-process. The QA recorded the information

on the OBG tracking log.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Patterson,Rodney	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer